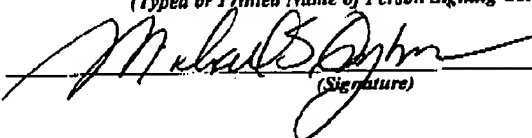


<b>CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)</b>			<b>Docket No.</b> 121027-069
Applicant(s): Satoru TANGE			
<b>Application No.</b> 09/944,477	<b>Filing Date</b> August 31, 2001	<b>Examiner</b> Jeff Aftergut	<b>Group Art Unit</b> 1733
Invention: <b>PROCESS FOR MANUFACTURING ELASTICALLY STRETCHABLE AND CONTRACTIBLE COMPOSITE SHEET</b>			
			<b>RECEIVED</b> <b>CENTRAL FAX CENTER</b> <b>DEC 07 2004</b>
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is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. <u>703-872-9306</u> )			
on <u>December 7, 2004</u> <small>(Date)</small>			
<div style="text-align: center;"><b>Michael S. Gzybowski</b> <small>(Typed or Printed Name of Person Signing Certificate)</small>  <small>(Signature)</small></div>			
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P18/REV02

PATENT APPLICATION**RECEIVED  
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*Group*  
*Art Unit:* 1733

*Attorney*  
*Docket No.:* 121027-069

*Applicant:* Satoru TANGE

*Invention:* PROCESS FOR MANUFACTURING  
ELASTICALLY STRETCHABLE AND  
CONTRACTIBLE COMPOSITE SHEET

*Serial No.:* 09/944,477

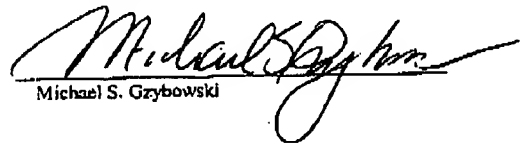
*Filed:* August 31, 2001

*Examiner:* Jeff Aftergut

Certificate Under 37 CFR 1.8(h)

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on December 7, 2004

  
Michael S. Gzybowski

RESUBMISSION OF REPLY BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Examiner's Answer mailed September 16, 2004 in connection with the above-identified application, appellant submits the present Reply Brief.

It is noted that this Reply Brief was previously filed on November 16, 2004, but inadvertently identified the application by Serial No. 09/994,477. This inadvertent typographical error was brought to the undersigned's attention by the Assignee. It is noted that the Reply Brief was otherwise identified by the correct title, correct inventor, correct filing date and was sent to the correct Examiner and the correct art unit.

New Issues Raised by the Examiner

On page 3 of the Examiner's Answer the examiner states that:

The reference [Sisson] suggested that the fibers of the nonwoven layer under such strain during the stretching operation would have been individualized in a manner similar to that claimed.

On page 6 of the Examiner's Answer the examiner states:

The reference to Sisson suggested that those skilled in the art would have bonded the nonwoven elastic web [filaments] 24 with the nonelastic web [filaments] 22 at cross over points 26 wherein the bonding would have been at discrete locations, see Figure 1. The reference suggested that after formation one skilled in the art would have stretched the web wherein the nonelastic web would have been elongated and oriented as depicted in Figure 2. (corrections added with emphasis).

On page 9 of the Examiner's Answer the examiner states that:

With regard to the individualizing of the filaments, the reference to Sisson clearly suggested the individualization of the inelastic filaments which were not bonded to the elastic web at the cross over points.

Response to New Issues Raised by the Examiner

Appellant's independent claim 1 is a process claim which requires the steps of:

- (b) extending said first web in the one direction within a range that permits elastic stretch and contraction of the first web;
- (c) continuously feeding a second web capable of inelastic extension and composed of thermoplastic fibers along the one direction;
- (d) superimposing said second web on at least one surface of the extended first web and joining said second web to the first web in an intermittent manner along the one direction to provide a composite web;

- (e) extending the composite web in the one direction within a range that permits elastic stretch and contraction of the first web; and
- (f) allowing the extended composite web to retract by an elastic contraction force of the first web to thereby obtain a composite sheet in which individual thermoplastic fibers of the second web are neither fused nor mechanically entangled tightly with each other between discrete areas where the first and second webs are joined together in step (d).

Appellant's claim 2 requires that: "the thermoplastic synthetic fibers are partly freed from the engagement to the extent that they individualized."

In the Office action mailed July 21, 2003 the examiner raised the issue that the term "individualized" was not recognized in the art. In response independent claim 1 was changed to recite that the "individual thermoplastic fibers of the second web are neither fused nor mechanically entangled tightly with each." This recitation replaced the term "individualized" in claim 1.

The examiner now takes the position that Sisson teaches individualizing the filaments.

Appellant submits that Sisson does not teach individualizing the filaments and that the teachings of Sisson, as relied upon by the examiner do not render the pending process claims obvious.

First, it is submitted that contrary to the examiner's reliance upon Sisson as cited above, Sisson clearly teaches with reference to Figs 1 and 2 that the bonding points between the individual elastomeric filaments 24 and the non-elastic filaments 22 are maintained after the cloth is stretched and relaxed. Note particularly column 14, lines 13-15 where Sisson states that "the bond points 26 return to substantially their original positions."

Also note that in Fig. 2 the bond point 26 or Fig. 1 are maintain, so that the filaments have not been individualized by breaking the bonding points 26.

It is important to note that appellant's independent claim 1 recites that "individual thermoplastic fibers of the second web are neither fused nor mechanically entangled tightly with each other between discrete areas where the first and second webs are joined together."

This claim recitation requires that the point where the first and second webs are joined or bonded together remain intact, while the individual fibers of the second web are otherwise neither fused nor mechanically entangled tightly together.

Claim 2 further requires that any of the fibers of the second web that were engaged with each other by mechanical entanglement or fusion bonding and in step (e), are individualized at the end of the process.

Sisson's manner of bonding the elastomeric filaments 24 and the non-elastic filaments 22 at bond points 26 is not comparable to appellant's recitation regarding the first and second webs being joined together.

Moreover, it is noted that Sisson expressly maintains the bond points 26 and therefore does not teach fibers that are neither fused nor mechanically entangled tightly with each other. Furthermore Sisson does not teach individualizing fibers that were initially engaged with each other by mechanical entanglement or fusion bonding.

Second, it is noted that appellant's invention is directed to a process which includes a series of process steps.

In combining the teachings of Ness and Sisson to reject appellant's pending claims the examiner takes the position that:

...it would have been obvious....to employ the nonwoven web of Sisson in the process of Ness for making a textured and puckered elastic composite web.

In further combining the teachings of Ness, Sisson and Austin et al. the examiner takes the position that:

It would have been obvious....to employ the fibrous webs of material described by Austin et al in the manufacture of a composite laminate which included an elastic central core material wherein the same was stretched bonded with both preliminary stretching of the elastic prior to stretching followed by stretching subsequent to the formation of the composite.

This combination of reference teachings completely fails to address the issue as to whether the prior art teaches that it would have been obvious to perform appellant's claimed process which requires the steps of:

- (b) extending said first web in the one direction within a range that permits elastic stretch and contraction of the first web;
- (c) continuously feeding a second web capable of inelastic extension and composed of thermoplastic fibers along the one direction;
- (d) superimposing said second web on at least one surface of the extended first web and joining said second web to the first web in an intermittent manner along the one direction to provide a composite web;
- (e) extending the composite web in the one direction within a range that permits elastic stretch and contraction of the first web; and
- (f) allowing the extended composite web to retract by an elastic contraction force of the first web to thereby obtain a composite sheet in which individual thermoplastic fibers of the second web are neither fused nor mechanically entangled tightly with each other between discrete areas where the first and second webs are joined together in step (d).

The examiner's combination of Ness, Sisson and Austin et al. does not render obvious an active process step of extending a composition web and allowing the web to retract for the intentional purpose of obtaining a composite sheet in which individual thermoplastic fibers of the second web are neither fused nor mechanically entangled tightly with each other between discrete areas where the first and second webs are joined together.

Moreover, the examiner's combination of Ness, Sisson and Austin et al. does not render obvious an active process step that involves individualizing fibers that were initially fusion bonded or mechanically entangled.

The examiner's proposed combination of Ness, Sisson and Austin et al. only involves the incorporation of the nonwoven web of Sisson into Ness and incorporation of the fibrous webs of material described by Austin et al in the manufacture of a composite laminate.

Such modification of physical materials completely fails to address the active process limitations and results thereof which are elements of appellant's claimed invention.

Sisson does not teach breaking bond points 26. Accordingly, it cannot even be said that the prior art teaches the possibility of individualizing filaments - much less the desirability to do so.

As held by the federal circuit in *Grain Processing v. American Maize*:

The Examiner's effort to establish obviousness by showing that each element of the claimed products may be found somewhere in the prior art is unavailing. In determining obviousness, "the inquiry is not whether each element existed in the prior art, but whether the prior art made obvious the invention as a whole for which patentability is claimed. (5 USPQ 2d 1788, 1793 (Fed. Cir. 1988)).

The examiner has tried to show various elements of appellant's invention are found within the prior art, but has failed to establish that appellant's overall process, including each individual process step is obvious in the combination of the prior art teachings (Noting that Sisson fails to teach breaking bond points 26).

CONCLUSION

For the reasons advanced above and those set forth in appellant's Brief on Appeal, appellant respectfully contends that the rejection of claims 1-5 as being obvious under 35 U.S.C. §103(a) over Ness in view of Sisson further optionally taken with Austin et al. is improper because the examiner has not met his burden of establishing a *prima facie* case of obviousness.

Reversal of the rejection on appeal is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,

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